

**REMARKS**

**1. Abstract**

The Examiner has identified that the abstract of the disclosure does not commence on a separate sheet in accordance with 37 C.F.R. 1.52(b)(4). Submitted in connection with this Reply is an abstract that is presented on a separate sheet.

**2. Claims Rejections - 35 U.S.C. § 102**

Claims 1, 5, 8, 9, 13-15 and 17 have been rejected under 35 U.S.C. § 102(b) over International Patent Application Publication No. WO 00/20959 to Rapaich. Independent claim 1 has been amended to include the features of former claims 3 and 5, which have been cancelled. Similarly, independent claim 9 has been amended to include the features of former claims 11 and 13, which have been cancelled.

The combination of features recited by independent claims 1 and 9 is not taught by Rapaich. In particular, Rapaich fails to teach a threshold comparator, a timer and a capacitance change sensing device in combination with a pointing device.

It is acknowledged that Rapaich does disclose a pointing device that includes a ball that may be manipulated by a user as a directional input device. The pointing device includes a touch plate 60 that forms one plate of a capacitor. As described at page 6, lines 15-30, however, the touch plate is separate from the ball and is electrically connected (i.e., physically wired) to circuitry for sensing the presence of a user's hand or digit. Rapaich does not disclose a threshold comparator that controls when the actuation of the pointing device is enabled. Nor does Rapaich disclose a timing device adapted to switch off the energization automatically after a time has elapsed.

Accordingly, claims 1 and 9 recite novel and unobvious subject matter. Claim 5 has been cancelled. Claim 8 has been amended to depend from claim 1. Claim 13 has been cancelled. Claims 14 and 17 have been amended to depend from claim 9. Claim 15 depends from claim 14.

With respect to claims 14, Rapaich does not disclose of a ball that is capacitively connected to a detector device. With respect to claim 15, Rapaich does not disclose that the ball is a metallized plastic ball with a plastic or rubber coating.

It is noted that throughout the Office Action, the Examiner refers to claims 1-8 as "means plus function" claims. While the preamble of these claims recites "means for," it is submitted that the limitations of these claims recite structural elements that do not fall within the scope of 25 U.S.C. § 112 paragraph 6.

In view of the foregoing, reconsideration and withdrawal of the rejections under 35 U.S.C. § 102(b) is respectfully requested.

### **3. Claim Rejections - 35 U.S.C. ¶ 103**

Claims 2-3, 6-7, 10-11 and 16 have been rejected under 35 U.S.C. § 103(a) over Rapaich in view of GB 2 279 750 to Ryan. Claims 4, 6 (as amended) and 7 depend from claim 1. Claims 10 and 16 depend directly or indirectly from claim 9. Claims 2 and 11 have been cancelled. Also, Ryan's proximity sensing device is not disclosed for use in combination with a pointing device. Nor does Ryan teach a system where the capacitance of a pointing device ball forms part of a resonant circuit as set forth by claim 16.

Claims 18 and 19 have been rejected under 35 U.S.C. § 103(a) over Rapaich in view of EP 1 073 004 to Kiljander. Claims 18 and 19 depend from claim 9. Claim 19 has been amended to correct a typographical error. Also, Kiljander does not cure the above-noted deficiencies of Rapaich.

Claims 4 and 12 have been rejected under 35 U.S.C. § 103(a) over Rapaich in view of Ryan in further view of U.S. Patent No. 6,661,410 to Casebolt. Claim 4 depends from claim 1 and claims 12 depends from claim 9. Also, Casebolt does not cure the above-noted deficiencies of Rapaich.

In view of the foregoing, reconsideration and withdrawal of the rejections under 35 U.S.C. § 103(a) is respectfully requested.

### **4. Added Claims**

Claims 20-24 have been added to recite additional inventive features. For instance, claim 20 is directed to the arrangement of physical components of the claimed

input device and interactions of the components that result in the control of energization of the pointing device.

As set forth in claim 20, a member capacitively couples a resonant circuit to a conductive part of a user-manipulable member. Since the coupling is capacitive in nature, no physical connection is made between the conductive part and the resonant circuit. At page 7, lines 2-5, Rapaich describes an embodiment where "the activation region can be the ball transducer 52 itself such that as a user approaches touching the ball transducer 52, power is applied to the remaining circuitry in the pointing device to ensure it is ready to receive user input." However, this passage is not instructive of the claimed combination of features and is also inoperative since one of ordinary skill in the art would not be able to determine how to make the ball become the activation region from Rapaich's disclosure. In addition, Ryan discloses pairs of electrodes that are electrically connected to detection circuitry. As a result, claim 20 recites an input device arrangement that is not taught or suggested by the prior art of record.

As another example, claim 23 recites that the member used to capacitively couple the conductive part of the user-manipulable member and the resonant circuit is an antenna or pick-up. The prior art of record does not teach or suggest this feature. Similarly, the prior art of record does not teach or suggest that the member is spaced apart from a non-conductive cover of the user-manipulable member as set forth in claim 24.

## **5. Conclusion**

In light of the foregoing, it is respectfully submitted that the present application is in condition for allowance and notice to that effect is hereby requested. If it is determined that the application is not in condition for allowance, the Examiner is invited to initiate a telephone interview with the undersigned attorney to expedite prosecution of the present application.

If there are any additional fees resulting from this communication, please charge same to our Deposit Account No. 18-0988.

Respectfully submitted,

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